

Appl. No. : 09/514,999
Filed : February 29, 2000

AMENDMENTS TO THE CLAIMS

Please amend the Claim Form and Claim as follows. Insertions are shown underlined while deletions are ~~struck through~~.

1 (canceled)

2 (previously presented): The method according to Claim 10, wherein said nuclease is a nuclease contained in the yeast RNA-containing composition.

3 (previously presented): The method according to Claim 10, wherein the yeast RNA-containing composition is obtained from yeast selected from the group consisting of *Saccharomyces cerevisiae* and *Candida utilis*.

4 (currently amended): The method according to Claim 15, wherein the decomposition step is conducted by digesting the yeast RNA-containing composition with ribonuclease A and/or trypsin~~added to a solution containing the yeast RNA-containing composition, at a pH value of 3-10 and at a temperature of 10-70°C.~~

5 (currently amended): The method according to Claim 15, wherein the decomposition step is conducted by hydrolyzing at 20-100°C the yeast RNA-containing composition with sodium hydrate~~alkali added to a solution containing the yeast RNA-containing composition at a normality of 0.1-5N.~~

6 (previously presented): The method according to Claim 10, wherein the yeast RNA-containing composition is an extract obtained by physically crushing yeast using a high-pressure homogenizer and an ultrasonic disintegrator.

7 (previously presented): The method according to Claim 10, wherein the yeast RNA-containing composition is an extract obtained from yeast using hot water at a pH value of 4-8 and at a temperature of 90-100°C, wherein sodium chloride is added to a yeast suspension with a yeast concentration of 5-25% to make a salt concentration of 1-10%.

8 (previously presented): The method according to Claim 10, wherein the yeast RNA-containing composition is an extract obtained by autolyzing yeast.

9 (canceled)

10 (currently amended): A method of obtaining polyamines, comprising the steps of:
providing a yeast RNA-containing composition;
subjecting said yeast RNA-containing composition to a decomposition step, comprising nuclease digestion or alkali hydrolysis, or~~for~~ increasing the yield of

polyamines recovered in a subsequent recovery step by approximately 2-3.2 times the yield of polyamines recovered in the subsequent recovery step without this decomposition step, under conditions where the yield with this decomposition step when continuing for approximately 15-18 hours is approximately 2-3.2 times the yield without this decomposition step, wherein said yeast RNA-containing composition is treated in solution with nuclease added in an effective concentration of ~~approximately 1-2 mg/ml~~, at approximately 25-37°C, and at a pH of approximately 6-8, or said yeast RNA-containing composition is dissolved in a 0.3 N alkali solution at 37°C; and

recovering the approximately 2-3.2 times greater yield of polyamines from the decomposed yeast RNA-containing composition produced.

11 (currently amended): The method according to Claim 10, wherein the nuclease is selected from the group consisting of ~~deoxyribonuclease I~~, nuclease P1, nuclease S1, phosphodiesterase I, ribonuclease A, ribonuclease B, ribonuclease T₁, ribonuclease T₂, and ribonuclease U₂.

12 (previously presented): The method according to Claim 10, wherein the alkali is sodium hydrate or potassium hydroxide.

13 (canceled)

14 (currently amended): A method of obtaining polyamines, comprising ~~the steps of:~~
a step for providing a yeast RNA-containing composition;
a step for ~~subjecting~~ said yeast RNA-containing composition to a decomposition step, comprising nuclease digestion or alkali hydrolysis, ~~or~~ for increasing the yield of polyamines recovered in a subsequent recovery step by approximately 2-3.2 times the yield of polyamines recovered in the subsequent recovery step without this decomposition step, under conditions where said yeast RNA-containing composition is treated in solution with nuclease added in an effective concentration of ~~approximately 1-2 mg/ml~~, at approximately 25-37°C, and at a pH of approximately 6-8, or said yeast RNA-containing composition is dissolved in a 0.3 N alkali solution at 37°C; and

a step for recovering the approximately 2-3.2 times greater yield of polyamines from the decomposed yeast RNA-containing composition produced.

15 (currently amended): A method of obtaining polyamines, comprising the steps of:
providing a yeast RNA-containing composition;

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decomposing said yeast RNA-containing composition by nuclease digestion or alkali hydrolysis to ~~separate~~yield polyamines from high-molecular weight substances in the yeast RNA-containing composition ~~to a degree achieved in an amount obtained by treating when~~ the yeast RNA-containing composition is ~~treated~~ for about 15-18 hours in solution with nuclease added in an effective ~~concentration of about 1-2 mg/ml~~, at about 25-37°C, and at a pH of about 6-8, or in an about 0.3 N alkali solution at about 37°C; and recovering polyamines from the decomposed yeast RNA-containing composition produced.